SHINDENGEN

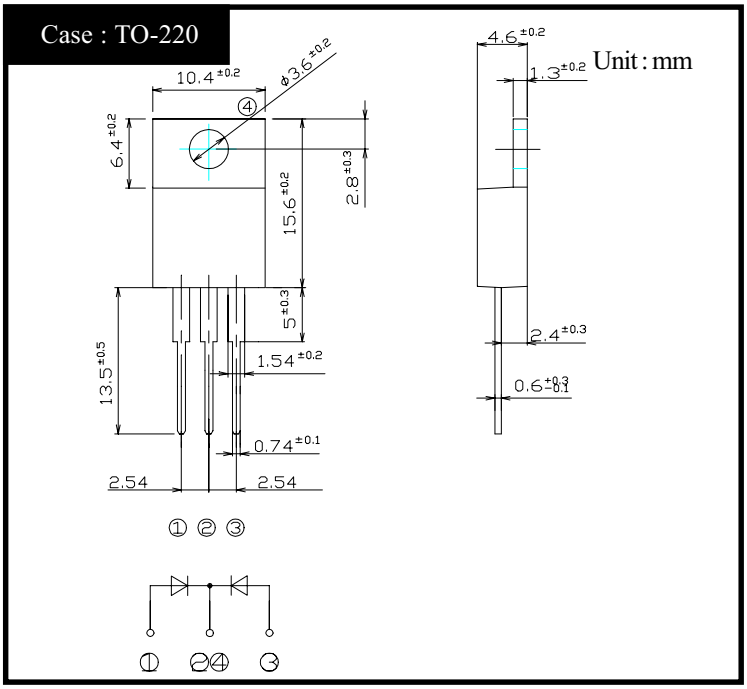
Schottky Rectifiers (SBD)

Dual

S15SCA4M

40V 15A

OUTLINE DIMENSIONS



FEATURE

- SMT
- Tj150℃
- P_{RRSM} avalanche guaranteed
- High current capacity with Small Package

APPLICATION

- Switching power supply
- DC/DC converter
- Home Appliances, Office Equipment
- Telecommunication

RATINGS

●Absolute Maximum Ratings (If not specified Tc=25℃)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		−40～150	℃
Operating Junction Temperature	Tj		150	℃
Maximum Reverse Voltage	V_{RM}		40	V
Repetitive Peak Surge Reverse Voltage	V_{RRSM}	Pulse width 0.5ms, duty 1/40	45	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, Tc=129℃	15	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=125℃	150	A
Repetitive Peak Surge Reverse Power	P_{RRSM}	Pulse width 10μs, Rating of per diode, Tj=25℃	330	W
Mounting Torque	TOR	(Recommended torque:0.3N·m)	0.5	N·m

●Electrical Characteristics (If not specified Tc=25℃)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	I_F=7.5A, Pulse measurement, Rating of per diode	Max.0.55	V
Reverse Current	I_R	V_R=V_{RM}, Pulse measurement, Rating of per diode	Max.5	mA
Junction Capacitance	Cj	f=1MHz, V_R=10V, Rating of per diode	Typ.340	pF
Thermal Resistance	θjc	junction to case	Max.1.7	℃/W

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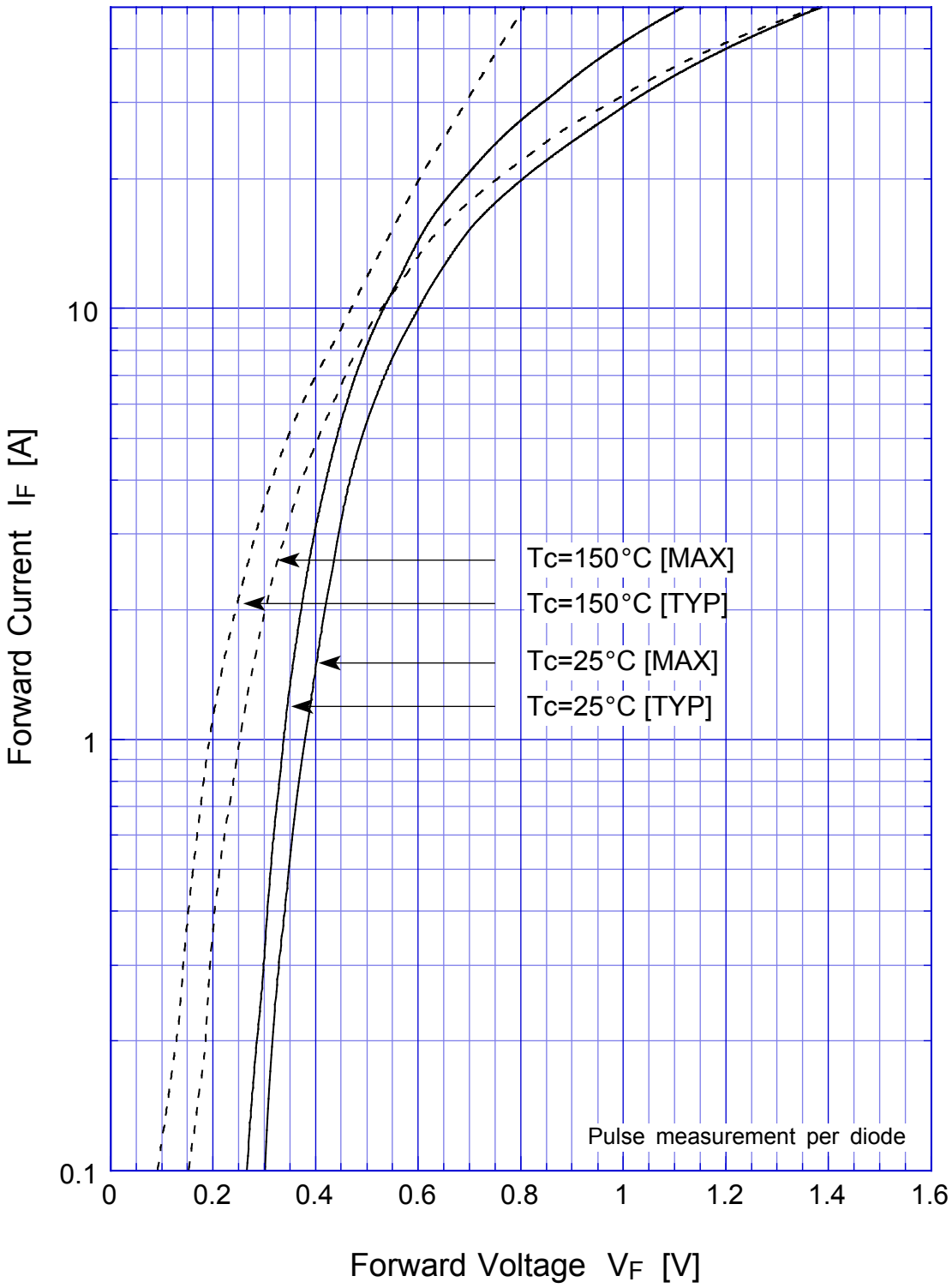
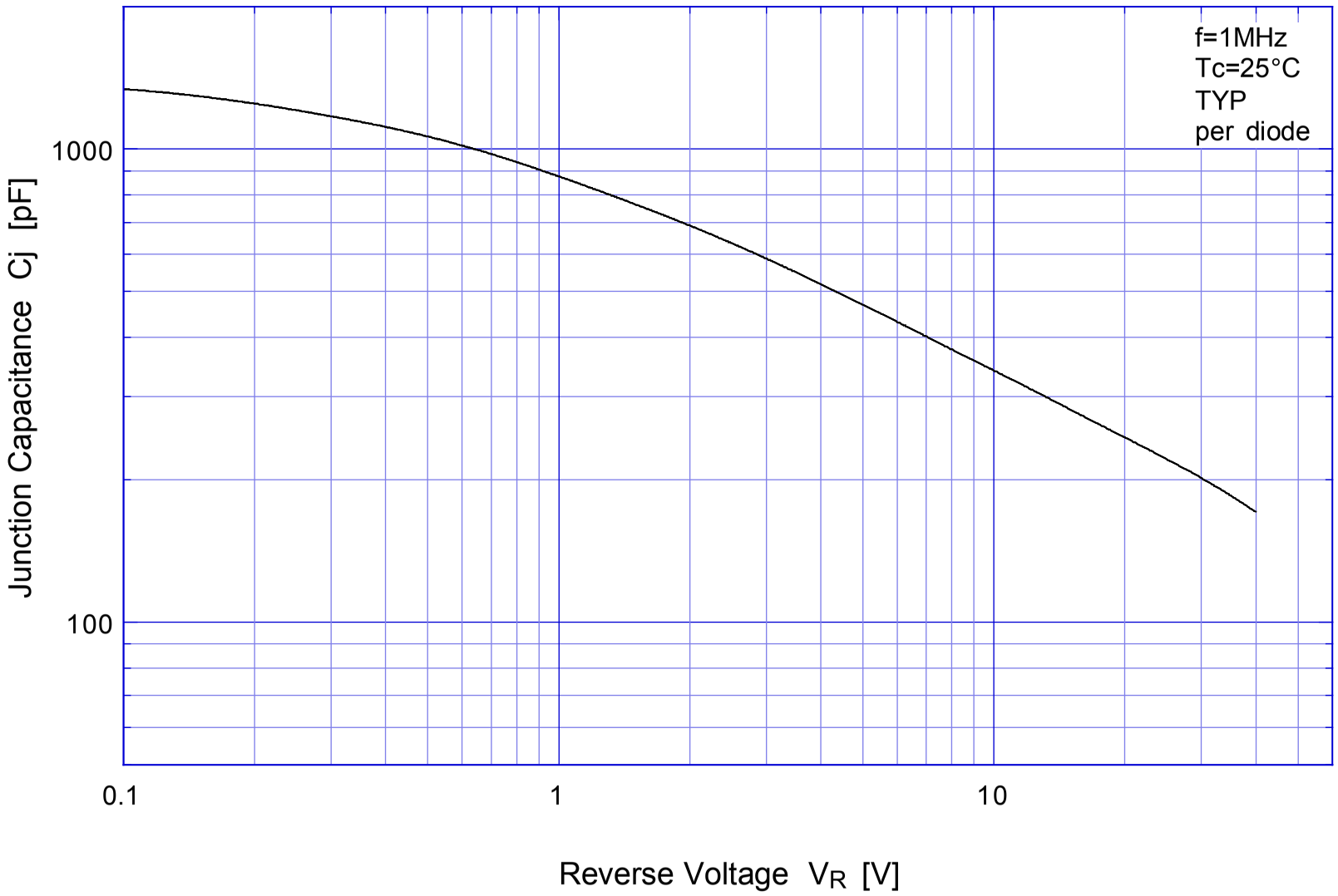
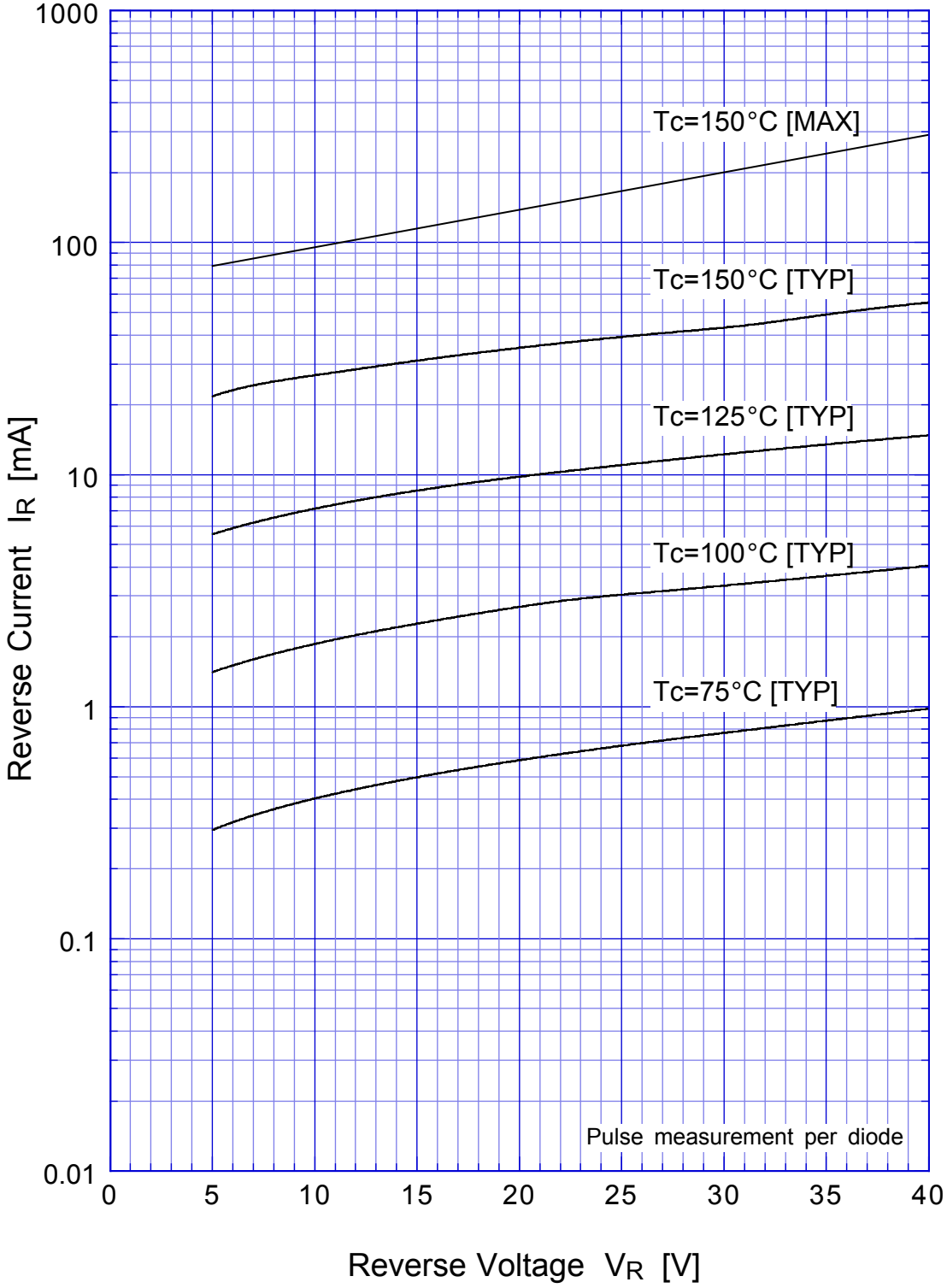
S15SCA4M Forward Voltage



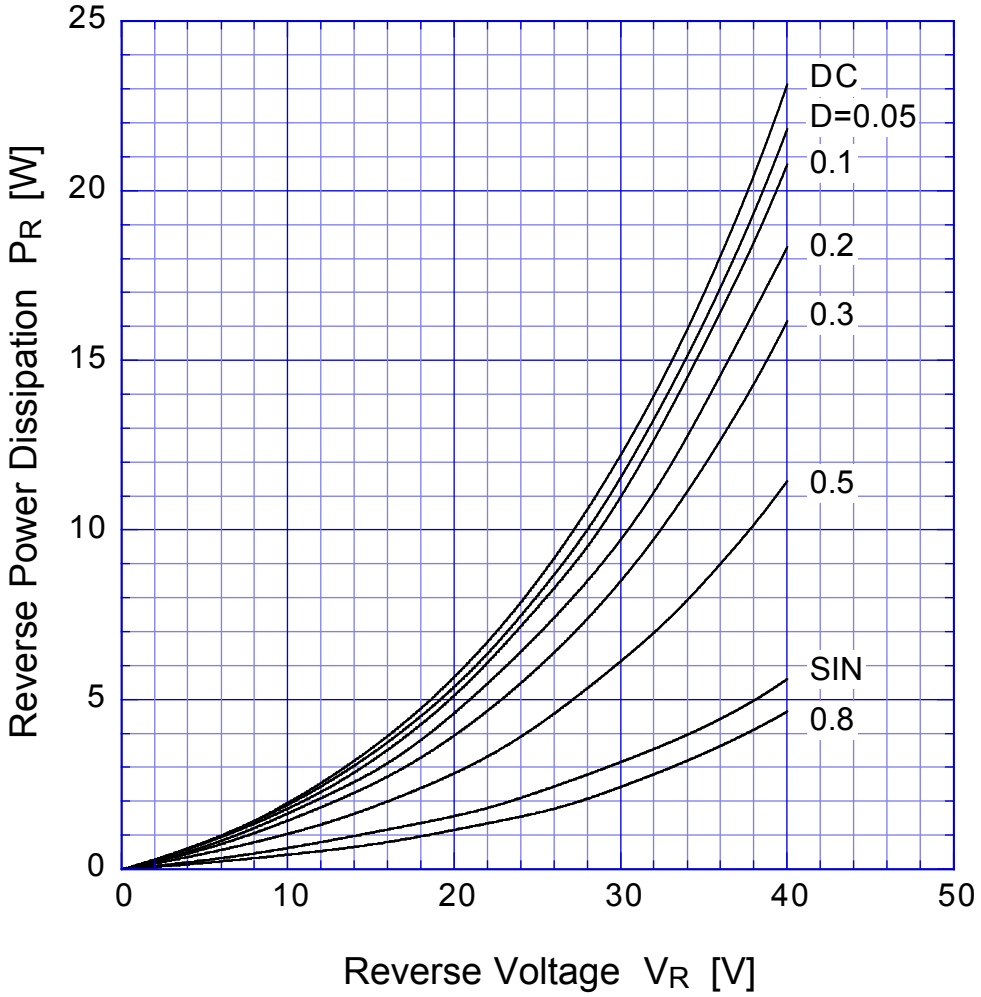
S15SCA4M Junction Capacitance



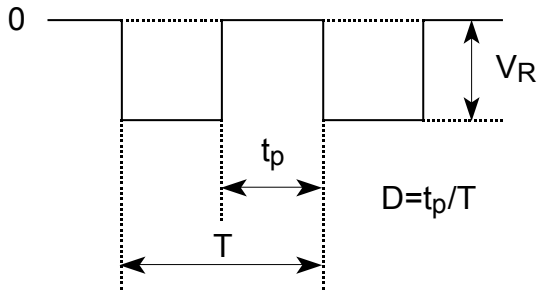
S15SCA4M Reverse Current



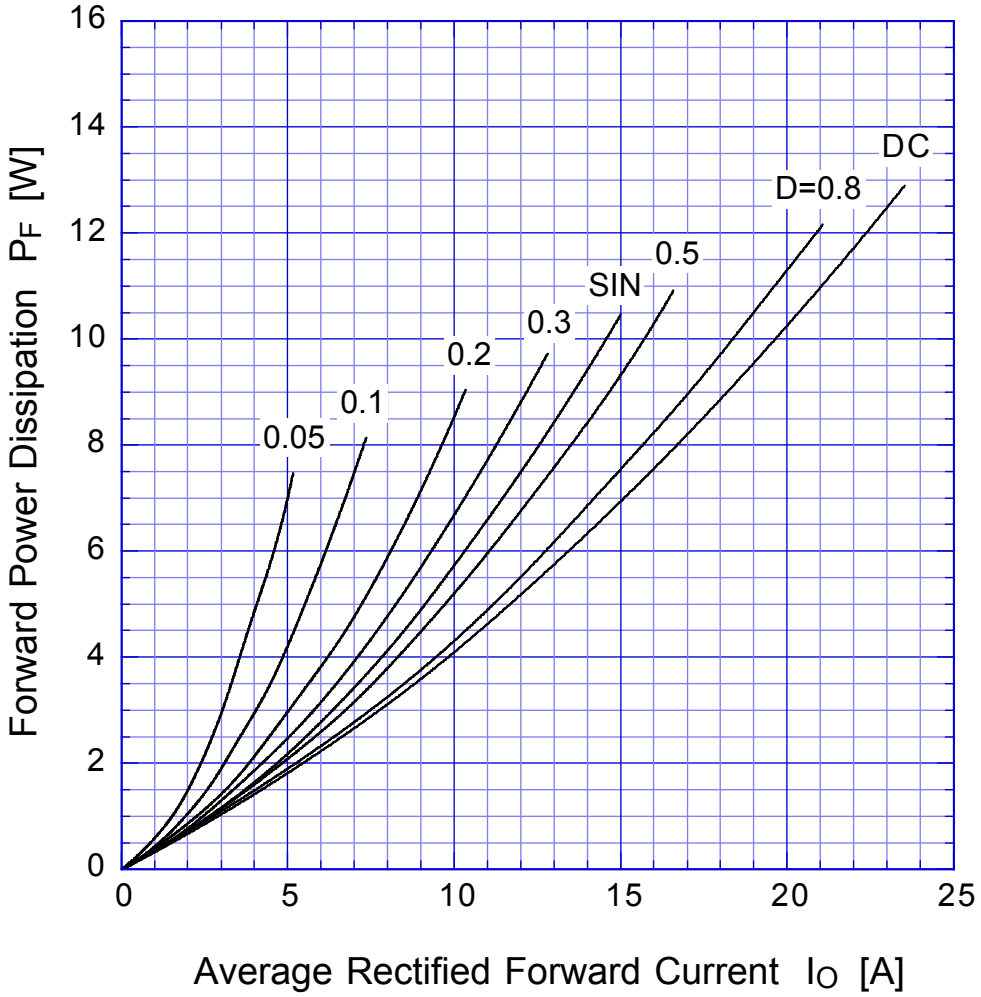
S15SCA4M Reverse Power Dissipation



Tj = 150°C



S15SCA4M Forward Power Dissipation



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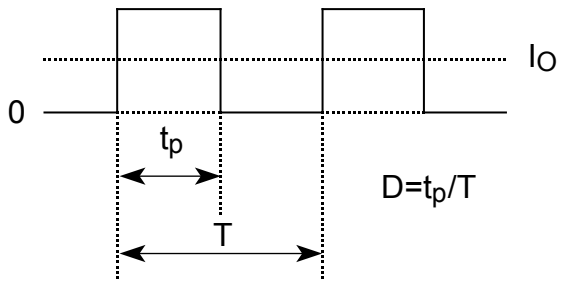
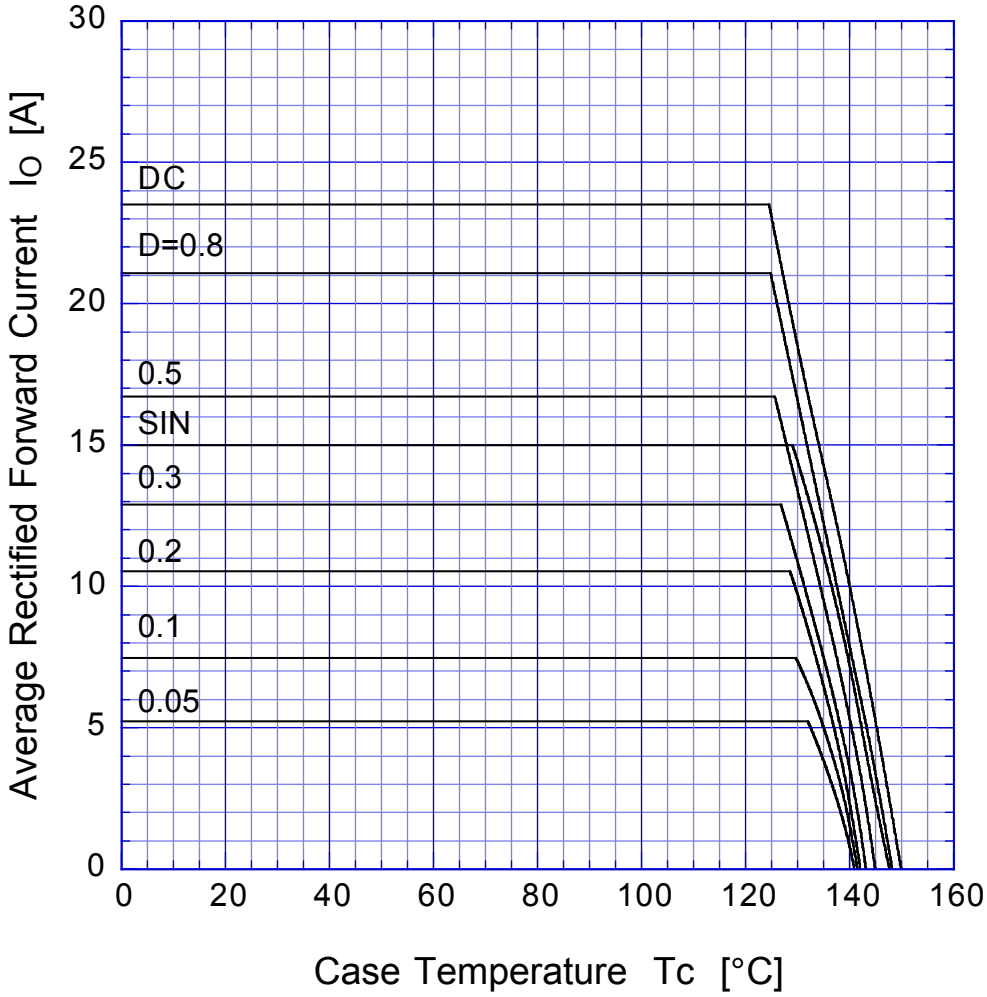
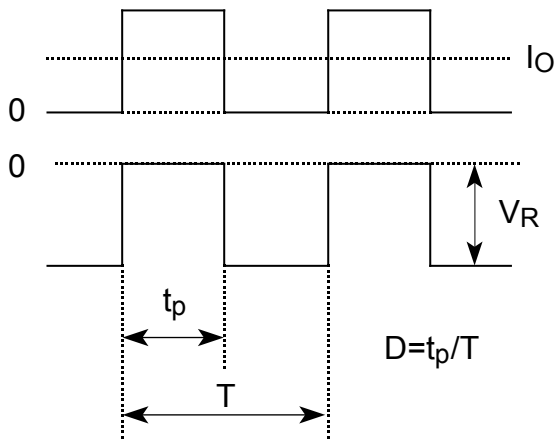


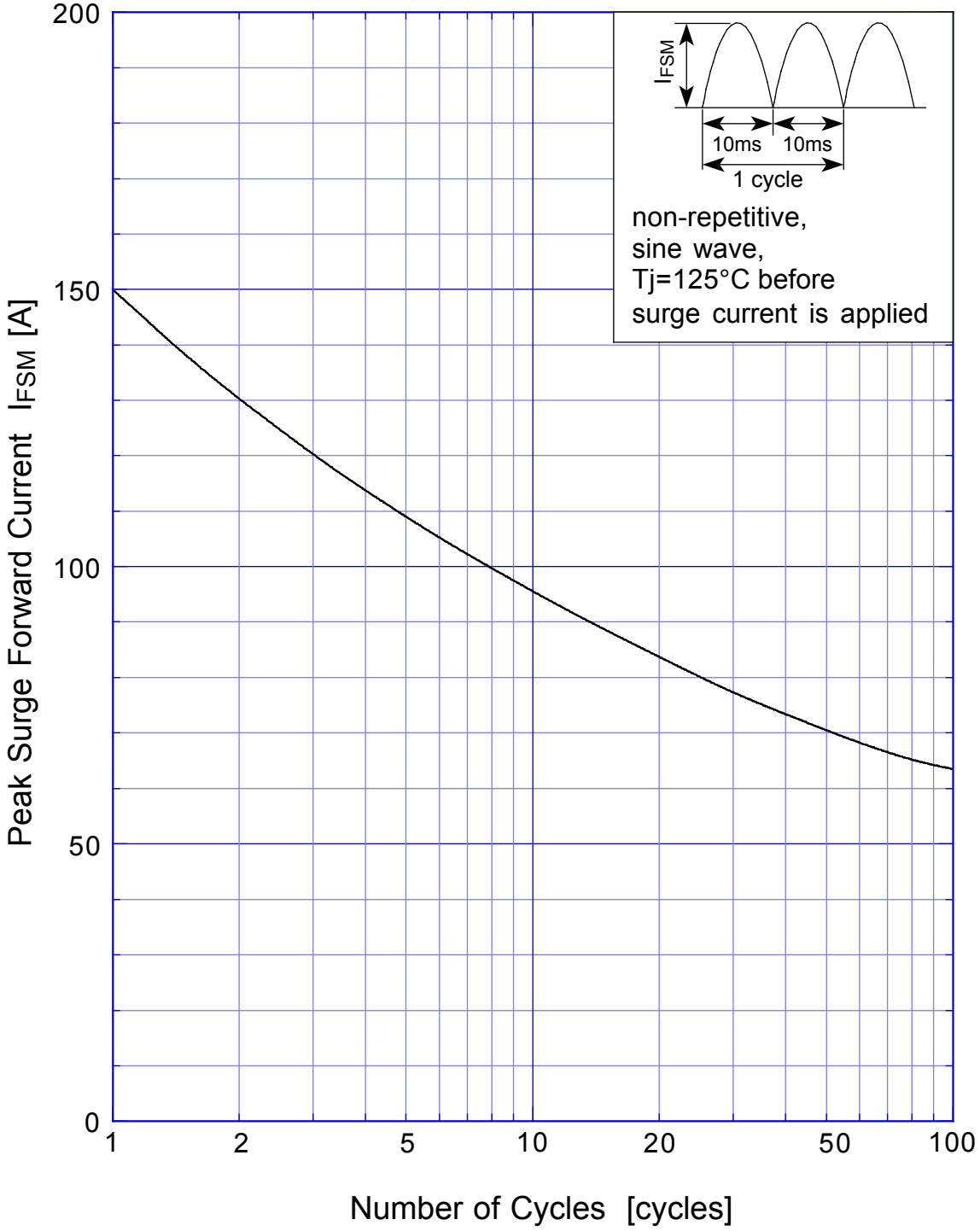
S15SCA4M Derating Curve



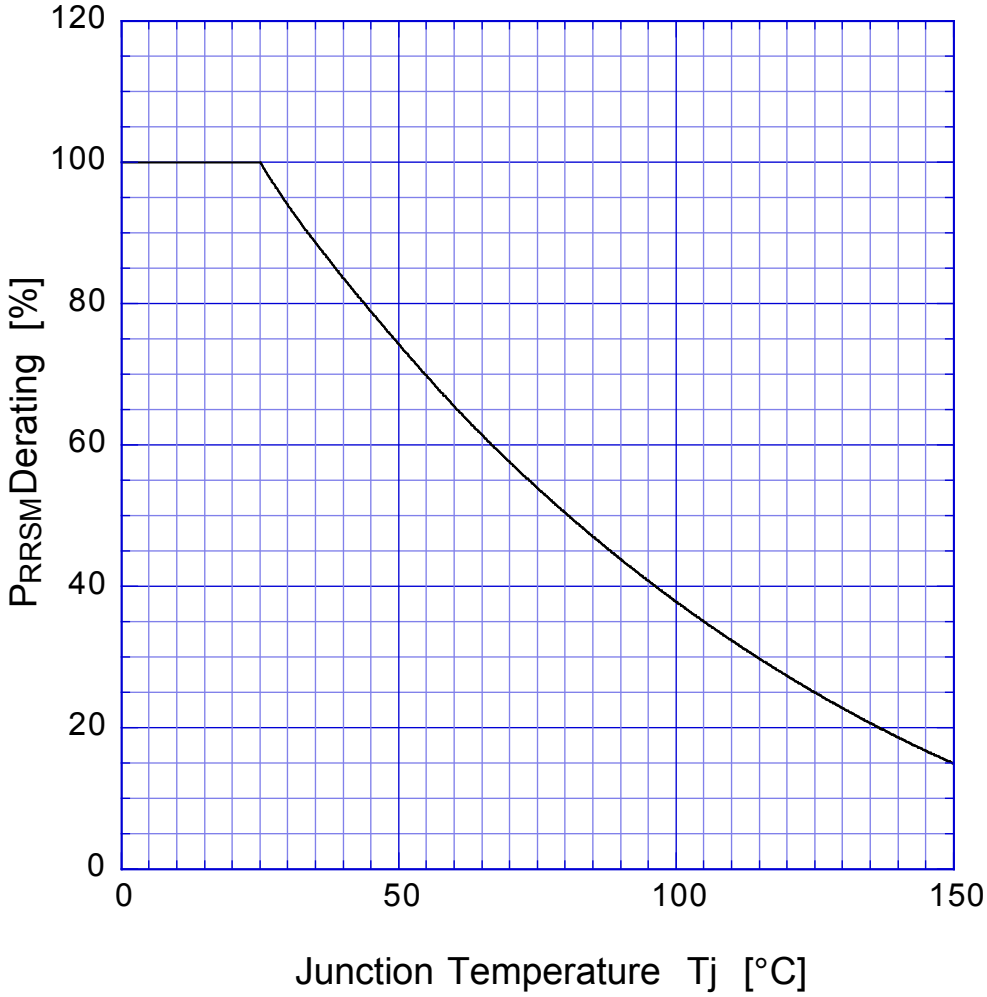
V_R = 20V

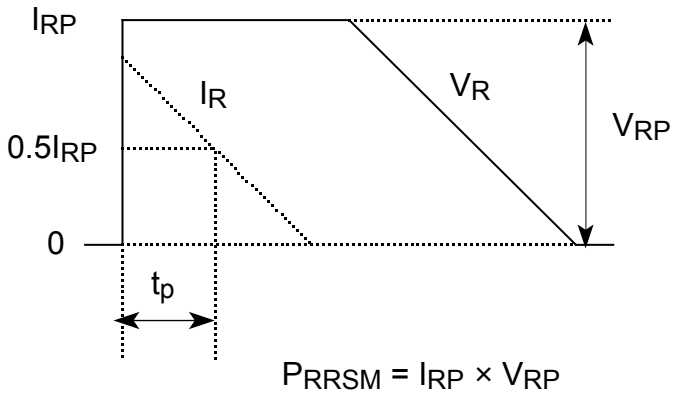
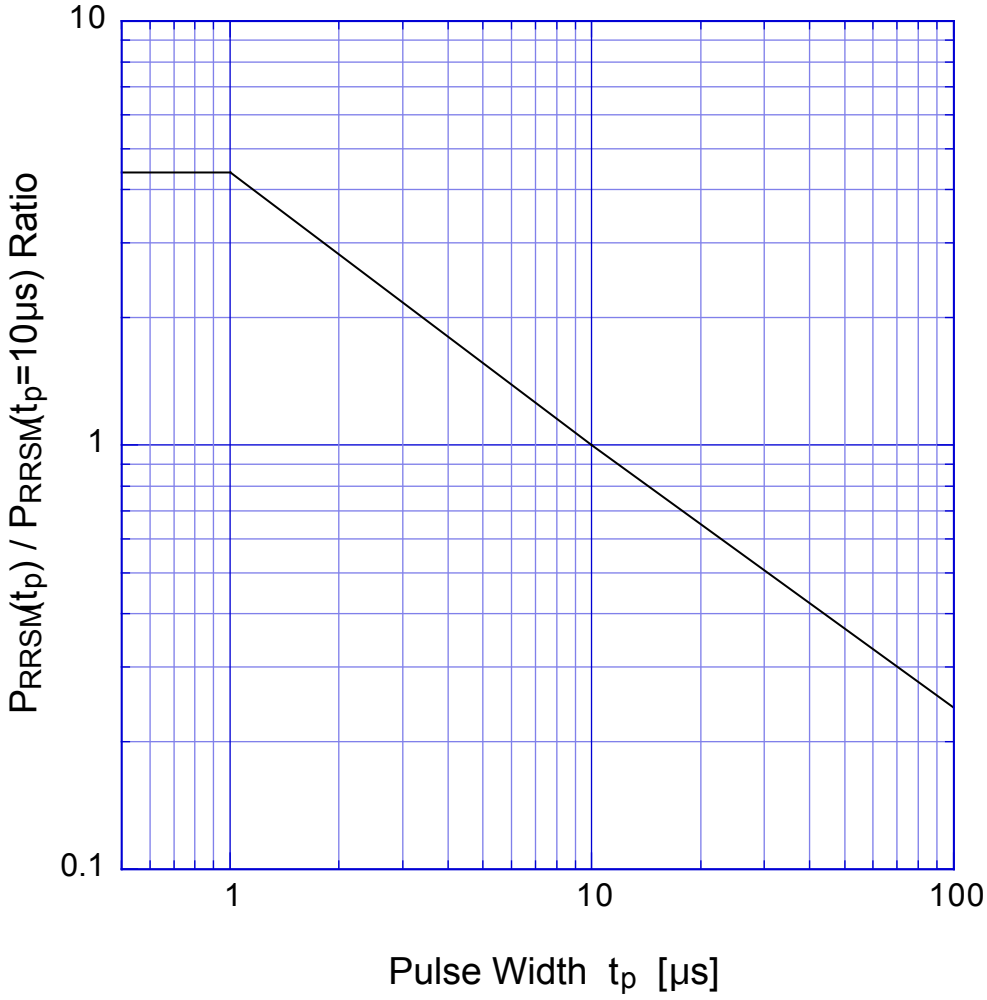
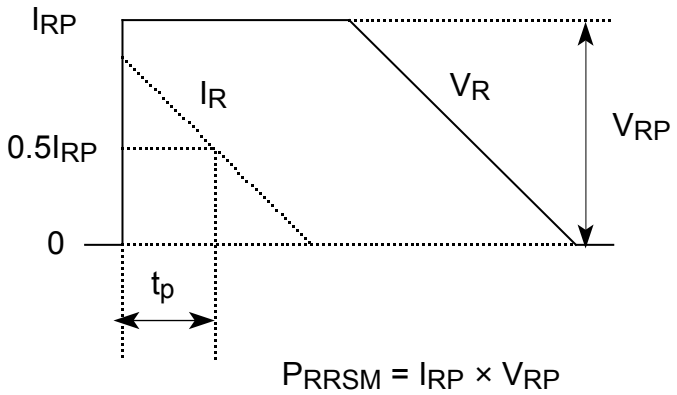


S15SCA4M Peak Surge Forward Capability



SBD Repetitive Surge Reverse Power Derating Curve





SBD Repetitive Surge Reverse Power Capability